Sequence Listing

<110> Cochran, Andrea G.
Skelton, Nicholas J.
Starovasnik, Melissa A.

<120> Structured Peptide Scaffold For Displaying Turn Libraries On Phage

<130> 11669.116USU1

<140> US 09/592,695
<141> 2000-06-13

<150> US 60/139,017
<151> 1999-06-14

<160> 49

<210> 1
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 2, 16
<223> Xaa is Trp, Tyr, Phe, His, Ile, Val or Thr.

<220>
<221> UNSURE
<222> 3, 17
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile or Val.

<220>
<221> UNSURE
<222> 4-15
<223> Xaa is a naturally occurring L-amino acid and 9 may be absent.

<400> 1
Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys
1 5 10 15

<210> 2
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 2
Cys Thr Trp Glu Gly Asn Lys Leu Thr Cys

1 5 10

<210> 3
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 3
Ser Cys Thr Trp Glu Gly Asn Lys Leu Thr Cys Lys
1 5 10

<210> 4
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 4
Cys Gly Asn Gln Gly Ser Phe Leu Thr Cys
1 5 10

<210> 5
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 5
Cys Thr Trp Gln Gly Ser Phe Leu Thr Cys
1 5 10

<210> 6
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 6
Ser Cys Gly Asn Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 7
<211> 12
<212> PRT
<213> Artificial Sequence

<220>

<223> turn peptide

<400> 7
Ser Cys Thr Asn Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 8
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 8
Ser Cys Gly Trp Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 9
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 9
Ser Cys Thr Trp Gln Gly Ser Phe Leu Thr Cys Lys
1 5 10

<210> 10
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 10
Met Cys Gly Asn Gln Gly Met Phe Leu Thr Cys Lys
1 5 10

<210> 11
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 11
Met Cys Thr Trp Gln Gly Met Phe Leu Thr Cys Lys
1 5 10

<210> 12
<211> 10

<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 12
Cys Thr Lys Val Trp Gln Leu Trp Thr Cys
1 5 10

<210> 13
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 13
Ser Cys Thr Trp Val Trp Gln Leu Leu Thr Cys Lys
1 5 10

<210> 14
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 14
Ser Cys His Phe Gly Pro Leu Thr Trp Val Cys Lys
1 5 10

<210> 15
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 15
Ser Cys Thr Trp Gly Pro Leu Thr Leu Thr Cys Lys
1 5 10

<210> 16
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE

<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<400> 16
Cys Thr Xaa Glu Gly Asn Lys Leu Thr Cys
1 5 10

<210> 17
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<400> 17
Cys Thr Xaa Glu Asn Gly Lys Leu Thr Cys
1 5 10

<210> 18
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<220>
<221> UNSURE
<222> 5
<223> Pro is D-Pro.

<400> 18
Cys Thr Xaa Glu Pro Asn Lys Leu Thr Cys
1 5 10

<210> 19
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE

<222> 3
<223> Xaa is Trp, Tyr, Leu, Val, Thr or Asp.

<220>
<221> UNSURE
<222> 5
<223> Pro is D-Pro.

<400> 19
Cys Thr Xaa Glu Pro Gly Lys Leu Thr Cys
1 5 10

<210> 20
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 3
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.

<400> 20
Cys Thr Xaa Glu Gly Asn Lys Leu Thr Cys
1 5 10

<210> 21
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 8
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.

<400> 21
Cys Thr Leu Glu Gly Asn Lys Xaa Thr Cys
1 5 10

<210> 22
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE

<222> 3
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.

<400> 22
Cys Thr Xaa Glu Gly Asn Lys Trp Thr Cys
1 5 10

<210> 23
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 8
<223> Xaa is Trp, Tyr, Phe, Leu, Met, Ile, Val or Ala.

<400> 23
Cys Thr Trp Glu Gly Asn Lys Xaa Thr Cys
1 5 10

<210> 24
<211> 102
<212> DNA
<213> Artificial Sequence

<220>
<223> synthesized sequence

<400> 24
taataataaa tggctgatcc gaaccgtttc cgcggtaaag atctgggtgg 50

cggtactcca aacgacccgc caaccactcc accaactgat agcccaggcg 100

gt 102

<210> 25
<211> 72
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthesized sequence.

<220>
<221> unsure
<222> 19-20, 31-32, 34-35, 37-38, 40-41, 52-53
<223> unknown base

<400> 25
tccgcctcgg cttatgcann stgcacttgg nnsnnsnnsn nsctgacttg 50

tnnsatggct gatccgaacc gt 72

<210> 26
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 26
Tyr Gln Asn Pro Asp Gly Ser Gln Ala
1 5

<210> 27
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 27
Ile Tyr Ser Asn Pro Asp Gly Thr Trp Thr
1 5 10

<210> 28
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 28
Ile Tyr Ser Asn Ser Asp Gly Thr Trp Thr
1 5 10

<210> 29
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 29
Ile Thr Ser Asn Ser Asp Gly Thr Trp Thr
1 5 10

<210> 30
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 30
Tyr Ile Thr Asn Ser Asp Gly Thr Trp Thr
1 5 10

<210> 31
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 31
Arg Gly Ile Thr Val Asn Gly Lys Thr Tyr Gly Arg
1 5 10

<210> 32
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 6
<223> Xaa is D-Pro or L-Asn.

<220>
<221> UNSURE
<222> 8
<223> Xaa is Orn.

<400> 32
Arg Tyr Val Glu Val Xaa Gly Xaa Lys Ile Leu Gln
1 5 10

<210> 33
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 33
Lys Lys Tyr Thr Val Ser Ile Asn Gly Lys Lys Ile Thr Val Ser
1 5 10 15

Ile

<210> 34
<211> 16

<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 34
Gly Glu Trp Thr Tyr Asp Asp Ala Thr Lys Thr Phe Thr Val Thr
1 5 10 15

Glu

<210> 35
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 35
Ala Cys Ser Pro Gly His Cys Glu
1 5

<210> 36
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 36
Cys Gly Val Ser Arg Gln Gly Lys Pro Tyr Cys
1 5 10

<210> 37
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 37
Gly Cys Lys Pro Thr Phe Arg Arg Leu Lys Trp Lys Tyr Lys Cys
1 5 10 15

Gly

<210> 38
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 38
Cys Ala Gly Phe Met Arg Ile Arg Gly Arg Ile His Pro Leu Cys
1 5 10 15

Met Arg Arg

<210> 39
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 39
Phe Cys Asn Gln Gly Ser Phe Leu Cys Tyr
1 5 10

<210> 40
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 40
Phe Cys Tyr Ile Cys Glu Val Glu Asp Gln Cys Tyr
1 5 10

<210> 41
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 41
Met Gln Ile Gly Val Lys Asn Pro Asp Gly Thr Ile Thr Leu Glu Val
1 5 10 15

<210> 42
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>

<221> UNSURE
<222> 7
<223> Xaa is Pro.

<220>
<221> UNSURE
<222> 8
<223> Xaa is Ala or Gly.

<400> 42
Met Gln Ile Gly Val Lys Xaa Xaa Lys Thr Ile Thr Leu Glu Val
1 5 10 15

<210> 43
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 2, 5
<223> Xaa is any amino acid.

<400> 43
Cys Xaa Pro Gly Xaa Cys
1 5

<210> 44
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 44
Glu Gly Asn Lys

<210> 45
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 45
Glu Asn Gly Lys

<210> 46
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 46
Gln Gly Ser Phe

<210> 47
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 47
Val Trp Gln Leu

<210> 48
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<400> 48
Gly Pro Leu Thr

<210> 49
<211> 118
<212> PRT
<213> Artificial Sequence

<220>
<223> turn peptide

<220>
<221> UNSURE
<222> 1-50
<223> Xaa is any naturally occurring amino acid, and all but one may be missing.

<220>
<221> UNSURE
<222> 52
<223> Xaa is Trp, Tyr, Phe, His, Ile, Val, or Thr.

<220>
<221> UNSURE
<222> 54-65
<223> Xaa is a naturally occurring L-amino acid and all but 3 may be missing.

<220>
<221> UNSURE
<222> 67

<223> Xaa is Trp, Tyr, Phe, His, Ile, Val, or Thr.

<220>
<221> UNSURE
<222> 69-118
<223> Xaa is a naturally occurring amino acid and all but one may be missing.

<400> 49
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30 35

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Trp Xaa Xaa Xaa Xaa
40 45 50 55

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Trp Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
60 65 70 75

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
80 85 90 95

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
100 105 110

Xaa Xaa Xaa Xaa
115